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North West Water

Dawson House, Great Sankey
Warrington WA5 3LW
Telephone Penketh 4321

RF(1)A25

23rd January, 1984

To: Members of the Regional Fisheries
Advisory Committee:
T.A.F. Barnes (Chairman); J.S. Bailey;
R. Bailey; A.G.R. Brown; F. Bunting;
J.M. Croft; P. Ecroyd; J.H. Fell;
C. Holland; R.D. Houghton; B. Irving;
G. Mann; P. Neal; J.B. Oldfield;
Dr. Pugh-Thomas; A. Richardson;
J.B. Robinson.

Dear Sir,

Please attend a meeting of the REGIONAL FISHERIES ADVISORY COMMITTEE to be held at 11.00 a.m. on MONDAY, 30 JANUARY 1984 in the BOARD ROOM, DAWSON HOUSE, GREAT SANKEY, for consideration of the following business.

Yours faithfully,

W. H. CRACKLE,
Secretary and Solicitor.

A G E N D A

1. Apologies for absence.
2. Minutes of the last meeting (previously circulated and approved by the Authority on 26 September 1983)
3. Representation of Local Fisheries Interests.
4. Dates and Venues of Future Meetings.
5. Fyke Nets.
6. Application to use Rotenone Fish Toxicant.
7. Dunsop Trout Farm - Establishment of Migratory Fish Rearing Facilities.
8. The Decline of Salmon and Sea Trout Catches in South Cumbria.
9. Decline of Salmon Stocks, River Eden.
10. Appointment of Reserve Bailiffs.
11. Fisheries Improvement Grant and Fisheries Equipment Loan Schemes.
12. Other Business.

RF2/A17

MINUTES OF A MEETING OF THE
REGIONAL FISHERIES ADVISORY COMMITTEE
27TH JUNE, 1983

Present: T.A.F. Barnes (Chairman)

J.S. Bailey	R.D. Houghton
W.S. Bell	J. Johnson
A.G.R. Brown	I. Jones
F. Bunting	G.E. Lowe
G. Campbell	J.E. Redhead
J.M. Croft	A. Richardson
E.P. Ecroyd	Major J.G.W. Skipwith
J.H. Fell	G. Wilson

48. APOLOGIES FOR ABSENCE

Apologies for absence were received from Messrs. G. Mann and Wm. McKenna.

49. MINUTES OF THE LAST MEETING

RESOLVED:

That the minutes of the last meeting of the Committee held on 25th April, 1983, be approved as a correct record and signed by the Chairman.

50. FYKE NETS AND OTTERS - PROPOSED BYELAW

The Regional Fisheries Officer reported that requests to fyke net licensees to fit protective netting to their nets to prevent otters becoming trapped had shown an excellent response. The effectiveness of the measure would be kept under review, and informal discussions were taking place with MAFF about a byelaw to protect otters.

RECOMMENDED:

That the following proposed byelaw be approved subject to any amendments agreed with MAFF:-

Exclusion of otters from fyke nets

- (a) Any fyke nets used in any water within the Authority's area for fishing for eels or any other kind of fish shall be so constructed that the entrance shall have stretched tightly across the whole of its area at all times when the net is being fished a net with a mesh not greater than 2 inch bar (4 inch stretched mesh) when wet. Alternatively, a solid square-mesh grill with bars separated by not more than 2.5 inches may be used.

- (b) For the purpose of this byelaw a fyke net is defined as:
"A conical or funnel-shaped net with inscales (or "gaols")
having up to three leaders attached to it each being not
more than 10 metres in length".
- (c) The provisions of this byelaw shall not apply to any
person using a fyke net for any purpose other than the
capture of eels provided that such person has obtained the
prior consent in writing of the Authority and uses the fyke
net in accordance with any conditions attached to such
consent.

51. NATIONAL WATER COUNCIL - FISHERIES ADVISORY COMMITTEE,
SALMON SALES WORKING GROUP

The Committee noted a report which summarised the main points of the final report of the NWC Fisheries Advisory Committee's Salmon Sales Working Group and expressed regret that because the group's brief had covered only England and Wales, a great opportunity had been missed of implementing a uniform scheme common to the whole of Great Britain.

52. FISHING LICENCE DUTIES 1984

It was noted that the proposed increased fishing licence duties had been approved by the Authority on 13th June, 1983, and were currently being advertised.

It was also noted that the Water Management Committee had deferred consideration of the Committee's recommendation for a change in the law to enable water authorities to increase fishing licence duties up to the prevailing rate of inflation without the need for ministerial approval, pending consideration by MAFF of a similar recommendation resulting from a recent consultation paper.

53. INCOME FROM SALE OF ROD AND LINE LICENCES 1982

The Committee received a report which summarised income received by the Authority from the sale of rod and line licences during 1982. Licence duties had been increased by 10% on 1st January 1982. Although income in 1982 had increased slightly, as a result of the increase in duties the latest figures showed a drop in sales of all types of rod and line licence.

54. FISHERIES IMPROVEMENT GRANT AND FISHERIES EQUIPMENT LOAN SCHEME

Although several enquiries had been made about the scope and operation of the schemes, there had only been four requests for grant application forms and none for the loan of equipment.

The Regional Fisheries Officer undertook to supply members with details of equipment available for loan.

55. SALMON AND FRESHWATER FISHERIES ACT 1975
SECTION 28 - ORDERS

It was reported that the occupier of a hatchery and fish farm at Mosser near Cockermouth proposed to export pike eyed-ova to fish farms on the continent. He had obtained permission from the National Trust to take adult pike from Loweswater in order to obtain supplies of ova and now wished to use fixed fyke nets (which would be 'fixed engines' for this purpose) to catch the pike.

The placing of fixed engines must be authorised by a Ministerial Order under S.28 of the Act and only the Authority can apply for such an Order.

The officers had no objections to the proposals but felt that as this was a commercial venture the occupier should be asked to meet the costs incurred by the Authority in seeking an Order on his behalf. His acceptance of this liability should be confirmed before the Authority initiated any action.

RECOMMENDED:

That subject to the fish farmer undertaking to pay all administrative and advertising expenses incurred by the Authority in obtaining an Order on his behalf, the Authority seek an Order under S.28 of the Salmon and Freshwater Fisheries Act 1975 to authorise the use of fixed fyke nets on Loweswater for a period of 5 years.

56. FISHING OFFENCES

The Committee received a report giving details of fishing offences and prosecutions undertaken by the Authority during 1982/83.

57. APPOINTMENT OF REGIONAL FISHERIES ADVISORY COMMITTEE 1983

On 13th June 1983, the Authority appointed those members named in appendix 1 hereto to the Committee for the period to 30th September, 1983.

58. MEMBERSHIP AND APPOINTMENT OF AREA
FISHERIES ADVISORY COMMITTEES 1983/84

Despite reorganisation of the water industry there were, as yet, no proposals for variations to the existing area committees, so consideration was given to the membership of the three area fisheries advisory committees for the year 1983/84.

RESOLVED:

That the members listed in appendix 2 to these minutes be appointed to the respective area advisory committees for the ensuing 'Authority Year'.

59. APPOINTMENT OF FISHERIES REPRESENTATIVES TO
LOCAL LAND DRAINAGE ADVISORY COMMITTEES

The constitution of the Land Drainage Advisory Committees provides for one member to represent fisheries interests on each of the Lancashire and Mersey and Weaver committees and two members on the Cumberland committee.

RESOLVED:

That the existing members be reappointed to serve on the appropriate Local Land Drainage Advisory Committees.

60. RIVER LUNE, CANOEING TUITION ON THE HALTON FISHERY -
TRIAL PERIOD AGREEMENT 1983

It was reported that the Authority had agreed with Lancaster University Canoe Club that, for a trial period only, the section of the Authority's Halton Fishery downstream from the old toll bridge to the mouth of Denny Beck (about 100m) would be made available to the university canoe club for tuition purposes. The trial period would expire at midnight on Sunday 31st July and the canoe club would make a token payment of £10 to the Authority for the facility. The trial would be monitored by NWWA officers and failure on the part of the club to abide by the conditions of the agreement would result in its withdrawal.

RESOLVED:

That subject to satisfactory arrangements being agreed with the club on a suitable canoe launching site, the agreement be approved.

61. HOLMWRANGLE HATCHERY - OUTBREAK OF IPN

The Regional Fisheries Officer reported an outbreak of Infectious Pancreatic Necrosis (IPN) amongst the fish stocked at Holmwrangle hatchery. This was a notifiable disease under the Diseases of Fish Act 1937. Advice on any necessary action had been sought from the MAFF Fish Disease Laboratory.

62. CHAIRMAN'S CLOSING REMARKS

The Chairman advised the Committee that this would be the last meeting to be held under the constitution of the present North West Water Authority. He thanked members and officers for their work on behalf of the Region's fisheries and for their interest and help in the effective running of the Committee since its foundation in April 1974.

NORTH WEST WATER AUTHORITYREGIONAL FISHERIES ADVISORY COMMITTEEREGIONAL FISHERIES ADVISORY COMMITTEE 1983Nominated to the Authority by

T.A.F. Barnes	Minister of Agriculture, Fisheries and Food
W.S. Bell	Cumbria County Council
G. Campbell	Cheshire District Councils
H. Caunce	Lancashire County Council
T.M. Farrer	Minister of Agriculture, Fisheries and Food
J.E. Gouldbourn	Lancashire District Councils
I. Jones	Greater Manchester County Council
G.E. Lowe	Greater Manchester District Councils
J.E. Redhead	Merseyside District Councils
Major J.G.W. Skipwith	Secretary of State for the Environment

A.G.R. Brown)	
F. Bunting)	
J.H. Fell)	
R.D. Houghton)	Appointed as persons interested in
J. Johnson)	fisheries in the area
Wm. McKenna)	
G. Wilson)	

Ex officio:

G. Mann *	Secretary of State for the Environment
A. Richardson *	Secretary of State for the Environment
J.S. Bailey	Chairman, Southern Area Fisheries Advisory Committee
J.M. Croft	Chairman, Central Area Fisheries Advisory Committee
E.P. Ecroyd	Chairman, Northern Area Fisheries Advisory Committee

*NOTE: Mr. Mann and Mr. Richardson are ex officio members of the Committee by virtue of their position as Chairman and Vice Chairman of the Authority respectively.

NORTH WEST WATER AUTHORITYREGIONAL FISHERIES ADVISORY COMMITTEEAREA FISHERIES ADVISORY COMMITTEES 1983/84Northern Area

Chairman: E.P. Ecroyd, Low House, Armathwaite, Carlisle, Cumbria.

Dr. J.I. Abernathy,	5 Honister Drive, Cockermouth, Cumbria.
A.E.I. Bell,	12 Hallpath, Langholme, Dumfriesshire.
F. Bunting,	30 Dent Road, Mirehouse, Whitehaven.
E. Cave,	9 Brunton Crescent, Carlisle, Cumbria.
A.C. Findlay,	Buccleugh Estates, Irvine House, Canonbie, Dumfriesshire.
A. Gleaden,	12 Meadowfield, Gosforth, Cumbria.
B. Irving,	11 Avon Close, Moreton West, Carlisle, Cumbria.
A. Marshall,	West View, Becker Met, Cumbria.
J.S. Marshall,	Little Cross, Appleby, Cumbria.
Wm. McKenna,	6 Spencer Street, Carlisle, Cumbria.
A. Moffatt,	15 Princess Avenue, Workington.
G.B. Sedgwick,	Hill Crest, Belle Vue, Cockermouth, Cumbria.
J. Thompson,	Inglenook, Rockcliffe, Carlisle, Cumbria.
R.B. Woodall,	Lane End, Waberthwaite, Bootle Station, Cumbria.

Central Area

Chairman: J.M. Croft, Orchard Farm, Whittingham Lane, Barton, Preston.

W. Bailey,	10 Mallowdale Road, Lancaster.
R. Barratt,	Cowmire Hall, Crossthwaite, Kendal Cumbria.
Dr. R.B. Broughton,	9 Victoria Road, Salford.
R.A. Challenor,	Green End, Mansergh, Carnforth, Lancashire.
J.H. Fell,	White Gates, Backbarrow, Ulverston, Cumbria.
R. Harper,	Collin Field Farm, Kendal, Cumbria.
A.L. Harris,	Blunt How, 12 Eden Park, Scotforth, Lancaster.
R.D. Houghton,	13/15 Winckley Street, Preston, Lancashire.
J. Johnson,	97 Liverpool Road North, Maghull, Liverpool.
G. Jones,	1 Caernarven Road, Preston, Lancashire.
Prof. W.E. Kershaw,	Mill Farm, Hesketh Bank, Nr. Preston, Lancashire.
J.P. Lord,	Spring Bank, Cow Ark, via Clitheroe.
H.B. Whittam,	29 Lyndhurst Road, Ulverston, Cumbria.
G. Wilson,	11 Guildford Avenue, Chorley, Lancashire.

Southern Area

Chairman: J.S. Bailey, 22 Plover Avenue, Winsford, Cheshire.

D. Bridgewood,	Horsepool Cottages, Mellor, Stockport, Cheshire.
A.G.R. Brown,	10 Dale Road, Golborne, Warrington.
C. Holland,	121 Northgate Road, Edgeley, Stockport.
G.W. Holmes,	72 Coronation Ave., Alsager, Stoke-on-Trent, Staffordshire.
F.R. James,	34 Sweet Briar Crescent, Crewe.
J.H. Lester,	23 Liverpool Road, Great Sankey, Warrington.
P. Neal,	16 Kingston Gardens, Hyde, Cheshire.
R. Newton,	3 Old Park Lane, Macclesfield, Cheshire.
Dr. M. Pugh Thomas,	Dept. of Biology, University of Salford, Salford.
J.A. Shanahan,	4 Sunninghill Street, Bolton, Lancashire.

NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY 1984REPRESENTATION OF LOCAL FISHERIES INTERESTS

1. Experience since 1974 has shown that Local Fishery Advisory Committees have been more concerned with developing or improving local angling facilities than with advising the Regional Committee on local fisheries matters, and it is felt that new ways of bringing local knowledge and opinions to the Committee should be sought.
2. The appointments approved by the Board on 9 January 1984 mean that there is no real need to retain formal local committees because apart from the Esk and Liddel Association, each local Consultative Association is represented on the Regional Committee. However, the need for informal communication between regional and local interests remains. Enquiries from other water authorities indicate that in some areas local "liaison" meetings satisfy this need. In addition, members should be aware that the Ministry of Agriculture, Fisheries and Food (MAFF) usually ask for proof that proposals have been discussed at local level when considering applications from the Authority.
3. Area fisheries officers regularly attend meetings of local Consultative Associations where they answer questions and deal with problems, thus avoiding misunderstandings about the Authority's work. It is intended that the area fishery officers would continue to attend these meetings. However, it is felt that these arrangements could be enhanced by the establishment of "liaison" meetings between this Authority and the Associations. It is suggested that it would be relatively easy to organise the meetings on a geographical basis, e.g. a Northern Group and a Southern Group. The meetings should normally be held annually, but special meetings could be arranged should the need arise.
4. Each Consultative Association would be invited to send an agreed number of representatives and the Authority would be represented by the regional and area fisheries officers. It is for consideration whether some members of the Regional Committee should also attend.
5. The meetings would be relatively informal but there would be agendas and the proceedings would be minuted. Items for discussion would include future fisheries policy, Authority fisheries activities, licence duty proposals, byelaws and general problems etc. These meetings would also enable the Associations' representatives to raise matters of concern. The minutes would provide evidence to MAFF of local consultation when applications from the Authority, particularly those concerning licence duties and byelaws, were being considered.

6. It is recommended that the Board be asked to agree that :-

- (i) The three Local Fisheries Advisory Committees be abolished.
- (ii) Annual liaison meetings be arranged with local Consultative Associations on the lines set out in the report.

RF(1)A8

NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY 1984DATES OF FUTURE MEETINGS

1. The Board has agreed that this Committee should normally meet not more than three times each year, and has asked that dates and venues for meetings in 1984 be submitted to the Board for approval on 6 February.
2. There are certain times of the year when specific items need to be discussed by the Committee, and with this in mind the officers wish meetings to be held in January, June and October. It is felt that it would be both useful and appropriate if venues for the meetings could be in different locations within the region. This would enable arrangements to be made, if necessary, to visit sites of particular relevance to the Committee business, in order to assist discussions.
3. It is recommended that in 1984, the two further meetings be held as follows :-

<u>Date</u>	<u>Times</u>	<u>Venue</u>
Monday, 18 June	11.00 a.m.	Cumbria area
Monday, 15 October	11.00 a.m.	Lancashire area

NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY 1984FYKE NETS

The Committee is asked to consider the following cases involving the use of fyke nets and make recommendations to the Board :-

(i) Use of fyke nets to take Pike

In 1983, P.N. Carruthers, Akebank Fish Farm, Mosser, Cockermouth, applied for permission to use nets in Loweswater to take pike in order to obtain supplies of ova for export. Fyke nets are fixed engines and must be authorised by a Ministerial Order for which only limited categories of person can apply. The Authority can apply for such Orders but Mr. Carruthers can not.

On 27 June 1983, the Committee recommended that the Authority should seek such an Order if Mr. Carruthers undertook to pay all expenses incurred in the application. After approval by the Authority, the necessary undertaking was given and the application submitted to MAFF.

The National Trust have now extended their permission for Mr. Carruthers to fish for pike in Crummock Water, Buttermere, and Derwentwater, and he has asked that these be included in the Order.

The Committee is asked to decide whether to recommend the Authority to ask MAFF to vary the application (which is in abeyance at the moment) to include the additional lakes.

(ii) Fyke Nets and Otters

In June 1983, following pressure from the Nature Conservancy Council and the Wildlife Trust, and discussions with MAFF, the Committee recommended that a byelaw be introduced which would regulate the construction of fyke nets to prevent otters from becoming trapped therein.

This recommendation was approved by the Authority and the the byelaw was submitted to MAFF for confirmation.

On 4 October 1983, following objections from netmen, MAFF convened a meeting of representatives from the Nature Conservancy Council, the Wildlife Trust, fyke netmen, and four Water Authorities who had applied for a byelaw to protect otters from fyke nets, to discuss the problem. At the meeting the conservation groups were unable to produce any evidence to suggest that otters were endangered by fyke nets and it now seems unlikely that the byelaw will be confirmed. It is, therefore, recommended that the application be withdrawn.

(iii) Use of Fyke nets to take eels during the period April - June

S.21 of the Salmon & Freshwater Fisheries Act 1975 prohibits the use, before 25 June in any year, in any waters frequented by salmon or migratory trout, of any devices for catching eels. However, such devices are allowed ".....for taking eels in such places, during such time and subject to such conditions as may be authorised by the water authority for the area with the consent of the Minister".

Mr. D. Evans, The Stone Jetty, Marine Road, Morecambe, seeks the Authority's consent for the use of fyke nets to take eels in two areas adjacent to the Stone Jetty during the months of April - June inclusive 1984. These eels would be held in a large mussel purification tank (which would otherwise be lying idle during that period) to supply live to customers. He appreciates that there is a possibility that migrating smolts might enter fyke nets, (though if these are fished on the bottom for eels the risk would be minimal) and would welcome regular monitoring of his catches by an Authority bailiff. A plan is attached showing the areas where netting is contemplated.

As the application is for 1984 only, it is recommended that it be approved, subject to regular monitoring of catches, and the Ministry consent be sought as a matter of urgency to enable Mr. Evans to commence netting, as proposed, in April.



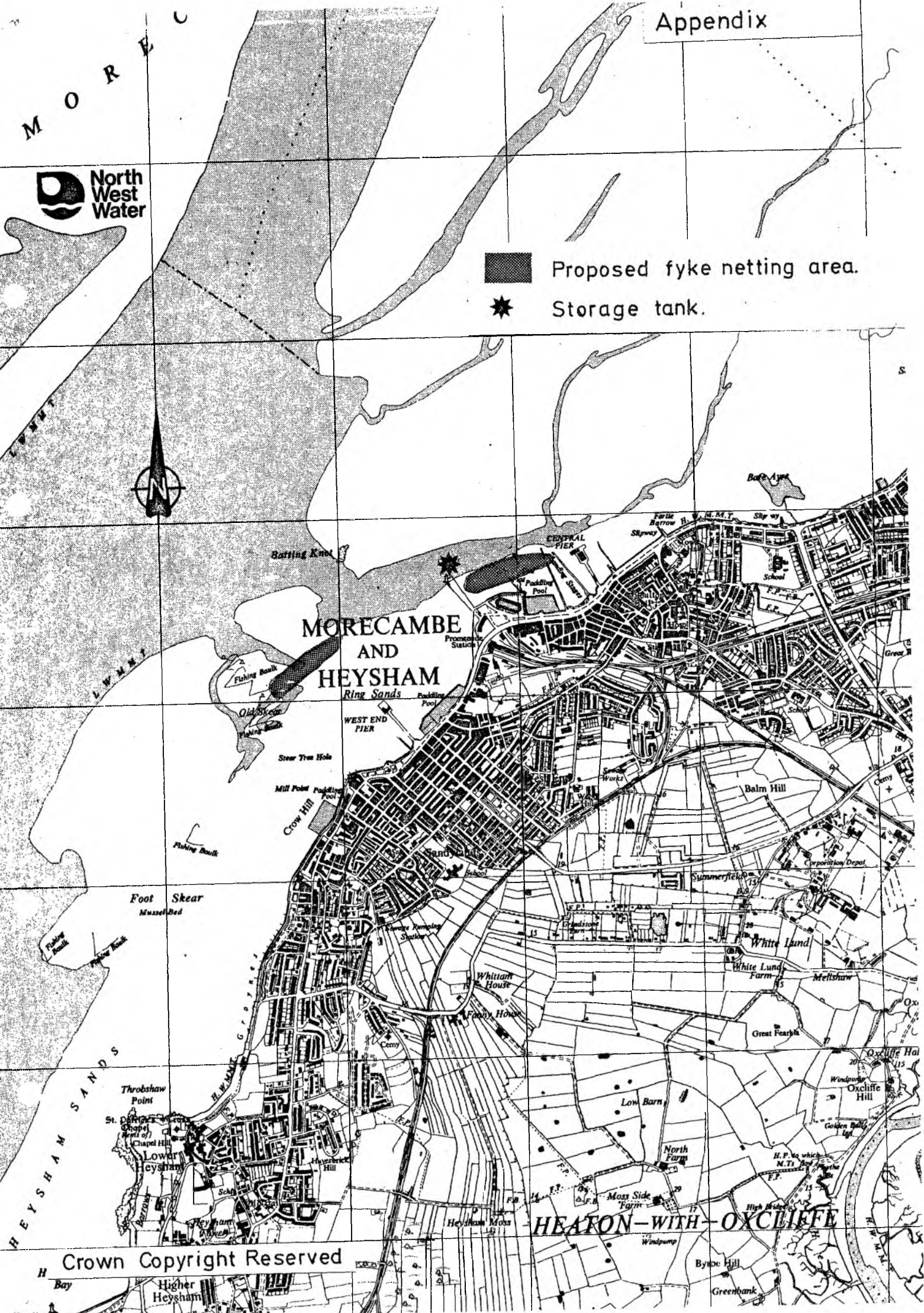
Proposed fyke netting area.



Storage tank.



**MORECAMBE
AND
HEYSHAM**



NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY, 1984APPLICATION TO USE ROTENONE FISH TOXICANT

1. During the past two years the Freshwater Fisheries Unit of Liverpool University has been carrying out an investigation on the Lancashire Canal at Stainton into the use of grass carp for weed control. This investigation has been financed by a grant from the Natural Environment Research Council and has been carried out in collaboration with British Waterways Board and with practical assistance from the Authority.
2. The major part of the project is due to end in April 1984 and the University is anxious to recover all the grass carp from the short section of canal involved. They intend to use netting and electro-fishing initially to remove alive as many of the fish as possible. However, to ensure total removal they would like subsequently to use Rotenone fish toxicant. Apparently grass carp are particularly susceptible to this substance and it is anticipated that it will be possible to achieve their removal by using Rotenone at a concentration below that which would affect the more tolerant native fish such as tench. Most of these will, of course, have been removed also by the initial netting and electrofishing.
3. Under section 5(2), Salmon and Freshwater Fisheries Act 1975 the Authority can give permission for the use of poisons such as Rotenone to take or destroy fish for scientific purposes, provided that approval is also given by the Minister of Agriculture, Fisheries and Food. The officers are of the opinion that the use of Rotenone is justified in this instance and that it would be used in the part of the canal concerned without undue risk to other fish stocks. The Committee is therefore asked to recommend to the Board that an application for approval of this action be submitted to the Ministry as soon as possible, seeking a reply before the end of March.

NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY, 1984DUNSOP TROUT FARM - ESTABLISHMENT OF MIGRATORY FISH REARING FACILITIES

1. Comprehensive investigations into continued heavy mortalities of salmon fry at Langcliffe Hatchery have failed to reveal why the fry usually died when they reached the "swim up" stage. The Regional Fisheries Advisory Committee at its meeting 25 April, 1983, requested the officers to investigate the practicality of establishing a new hatchery to replace Langcliffe at Dunsop Bridge or another suitable site. Meanwhile the Committee decided that Langcliffe be used solely for the production of unfed fry.
2. The present owners of the Dunsop Trout Farm indicated that they would be willing to allow limited facilities to the Authority but pointed out that as they have barely sufficient water for their own requirements, an additional supply would have to be made available from Authority sources. They have subsequently indicated willingness to co-operate only if they obtain some benefit from the Authority's operations on the site. Ideally they would like to have extra water from the aqueduct, with the river compensation remaining unaltered. This would enable them to use the extra water for the Trout Farm from the late spring onwards when the Authority's migratory fish rearing operations ended for the year. In the absence of any such water-sharing arrangements, the rental figure they require would be very substantially increased.
3. The Authority's Northern Division has no objection to the supply of half a million gallons per day from the aqueduct carrying water from the Trough of Bowland to the Longridge Reservoirs, provided that the compensation water to Langden Brook could be reduced proportionately. However, due to operational requirements they could not guarantee either continuous supply or water free from chemicals at all times.
4. The overall capital costs of establishing a suitable hatchery building and rearing tanks on the Dunsop site have been estimated at £13,700. Annual running costs, including an estimated figure of £5,000 for site rental but excluding staff costs, would be of the order of £6,000. The rental figure has been based on the assumption that it will not be possible to come to any satisfactory arrangement for sharing of additional water.
5. This annual cost compares with slightly over £1,600 in the 1983/84 estimates and represents a substantial increase, quite apart from the capital cost involved. Further, it is clear that continuous availability of additional pure water cannot be guaranteed, and it would obviously be rash to proceed on such a basis. It is, therefore, recommended that the development should not be pursued.

RF(1)A17

NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY, 1984THE DECLINE OF SALMON AND SEA TROUT CATCHES IN SOUTH CUMBRIA

1. At the meeting of the former Central Area Committee on 30 March, 1983, concern was expressed at the decline of the migratory fisheries in some rivers, the Rivers Duddon and Crake being cited as the most striking examples of this decline. It was suggested that an immediate stocking programme should be undertaken.
2. Before any action is taken it is important to assess the scale of the problem, the area affected and the likelihood that restocking would prove successful, using official catch returns which give a realistic assessment of the underlying trends in catches over recent years. (In this connection it is worth emphasising the value of full and accurate catch returns by anglers - something which many fail to do). The attached graphs show the rod catches on the various rivers in the area for the last twenty years. These have a number of shortcomings because sea trout catch numbers have not been available until recently for some rivers. The Leven and Crake catches have only been separated since 1977 and the separated catches are thus of little value for historical purposes.
3. The graphs show that from good catch levels in the mid-sixties all rivers showed a decline in the immediate post U.D.N. years with 1968 and 1969 being the low point in the area as a whole. Subsequently the Kent showed a remarkably rapid recovery and continues to show an improving trend for both salmon and sea trout. Mention should also be made of the Derwent in West Cumbria. This has been slower to recover, but again, an upward trend has become apparent. The Leven and Crake show little sign of change and it is impossible to predict from the graphs the future direction which catches will take.
4. It is in the Duddon that the most obvious and disturbing reductions in catches have taken place. The Duddon salmon catches are so small that any trend should be treated with caution, but the obvious and sustained reduction in catches of sea trout in the Duddon, (and of salmon in the South West Cumbrian rivers) indicates a problem which is probably independent of the effects of U.D.N.
5. Considerable data is available from electro-fishing surveys of juvenile salmonids, especially in the Crake, Duddon and West Cumbrian Esk, much of which was included in a biologist's report on low pH run-off, produced last year. To summarise, there are extremely low densities of juvenile salmonids in parts of the Esk and Duddon catchments, but the Crake generally has satisfactory juvenile populations, except in those areas such as Church Beck to the North West of Conniston Village, which are fishless due to high levels of toxic heavy metals from mine drainage. This is a situation which has existed for many years and is unlikely to have affected any recent population changes.

6. Whilst it is possible at present to indicate those areas which are fishless or with very low fish densities, it is impossible to say how long this situation has existed, or whether it is due to reduced numbers of adult spawners or low survival rates of ova and/or juveniles. One way of obtaining this information is to restock with eyed ova and fed fry in marginal areas and monitor the survival of these fish. This is already being done in the Duddon and the following fish have been planted in selected areas in the Duddon catchment during the past two years.

1982 Stocking

Eyed salmon ova	10,000
Eyed sea trout ova	28,000
Unfed salmon fry	6,500

1983 Stocking

Fed salmon fry	38,950
Unfed sea trout fry	26,400

The progress of these fish has been monitored by electro-fishing so far as possible from introductions made into Crosby Ghyll, Holehouse Ghyll, Logan Beck, Grassguards Ghyll and Tarn Beck, and the results are summarised below. Juvenile salmon are readily identifiable, but it is impossible to distinguish visually between juvenile brown and sea trout, except, of course, at the smolt stage.

Crosby Ghyll. No juvenile salmon found in vicinity of stocking site, but a good population of juvenile trout existed.

Holehouse Ghyll. Fair survival of juvenile salmon, but still a trout-dominated population.

Logan Beck. Fair survival of juvenile salmon, but still a trout-dominated population.

Grassguards Ghyll. No juvenile salmon found.

Tarn Beck. No juvenile salmon found. Juvenile trout population very low in upper half of beck, but some improvement in lower reaches.

The conclusion reached is that any proposed large-scale stocking programme would inevitably be restricted by the lack of suitable planting becks. A thorough removal of brown trout might prove advantageous, but this operation is very costly in time and manpower and there is a risk that it might benefit the trout population as much as any introduced population of juvenile salmon.

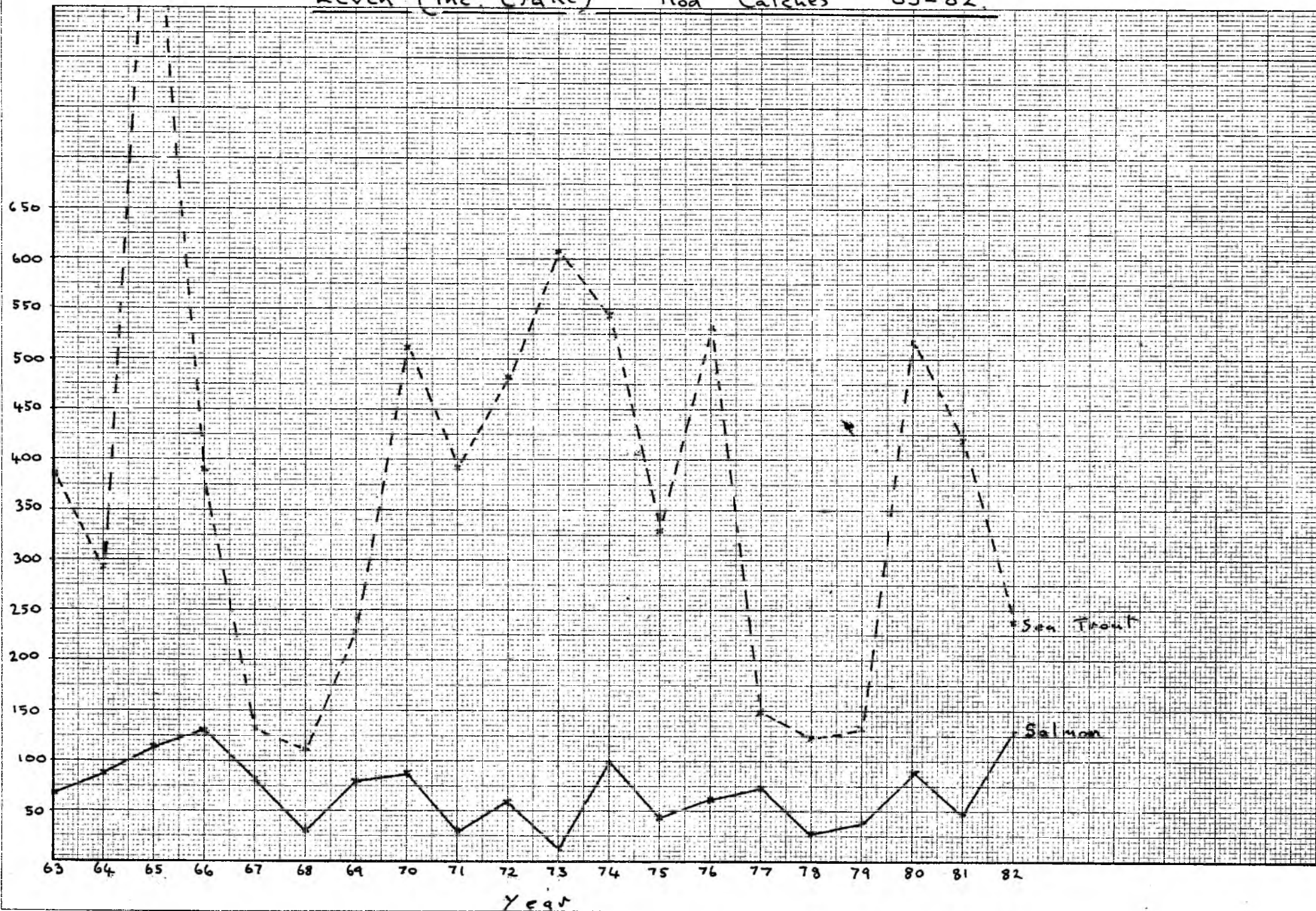
Although this experiment has extended over two years only, (which is really too short a period from which to draw firm conclusions), the indication is that there is not the scope for a large-scale stocking programme such as was advocated by the former Central Area Committee, and it is recommended that this policy should not be pursued.

2130

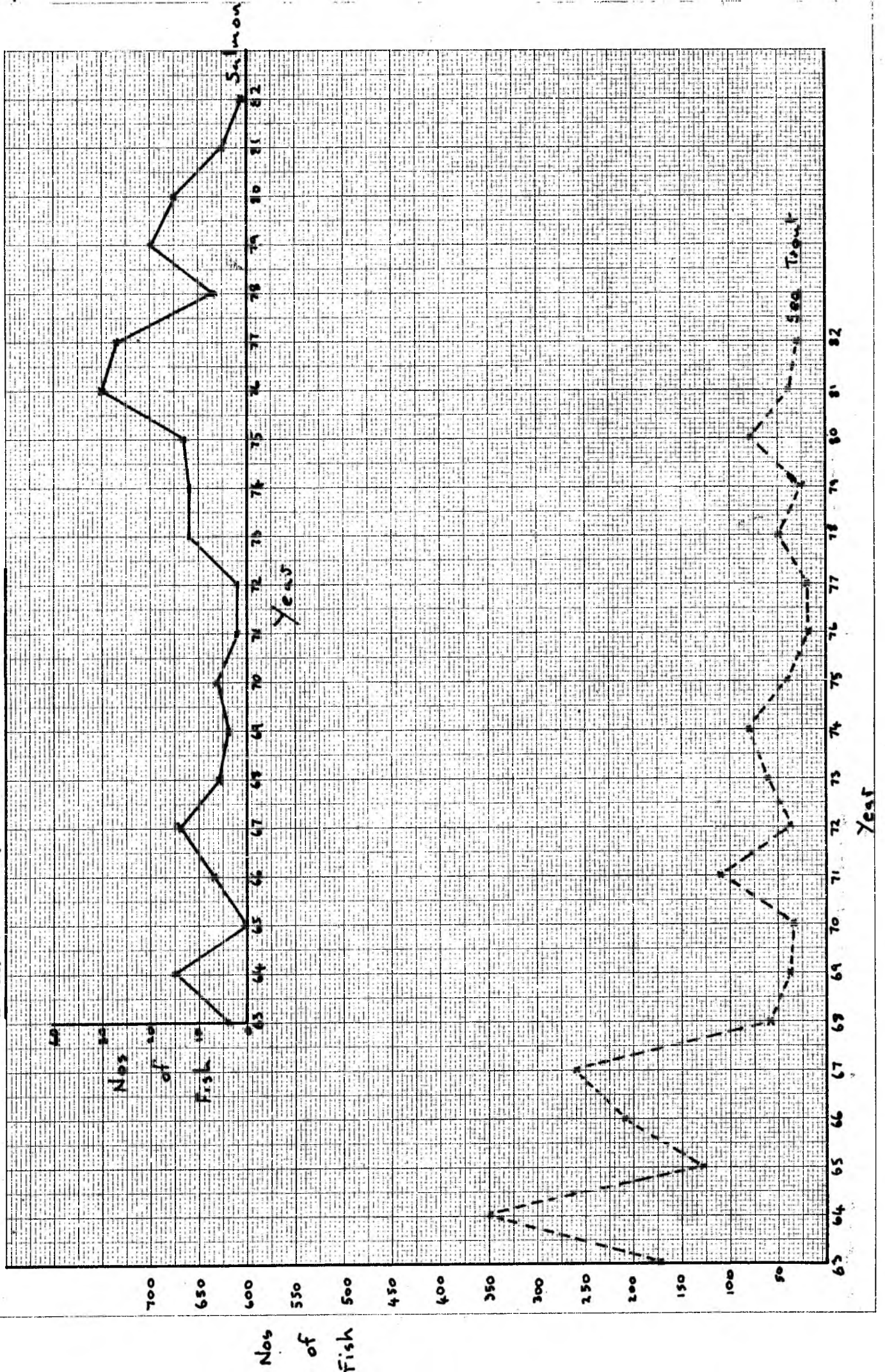
Leven (inc. Crake)

Rod Catches

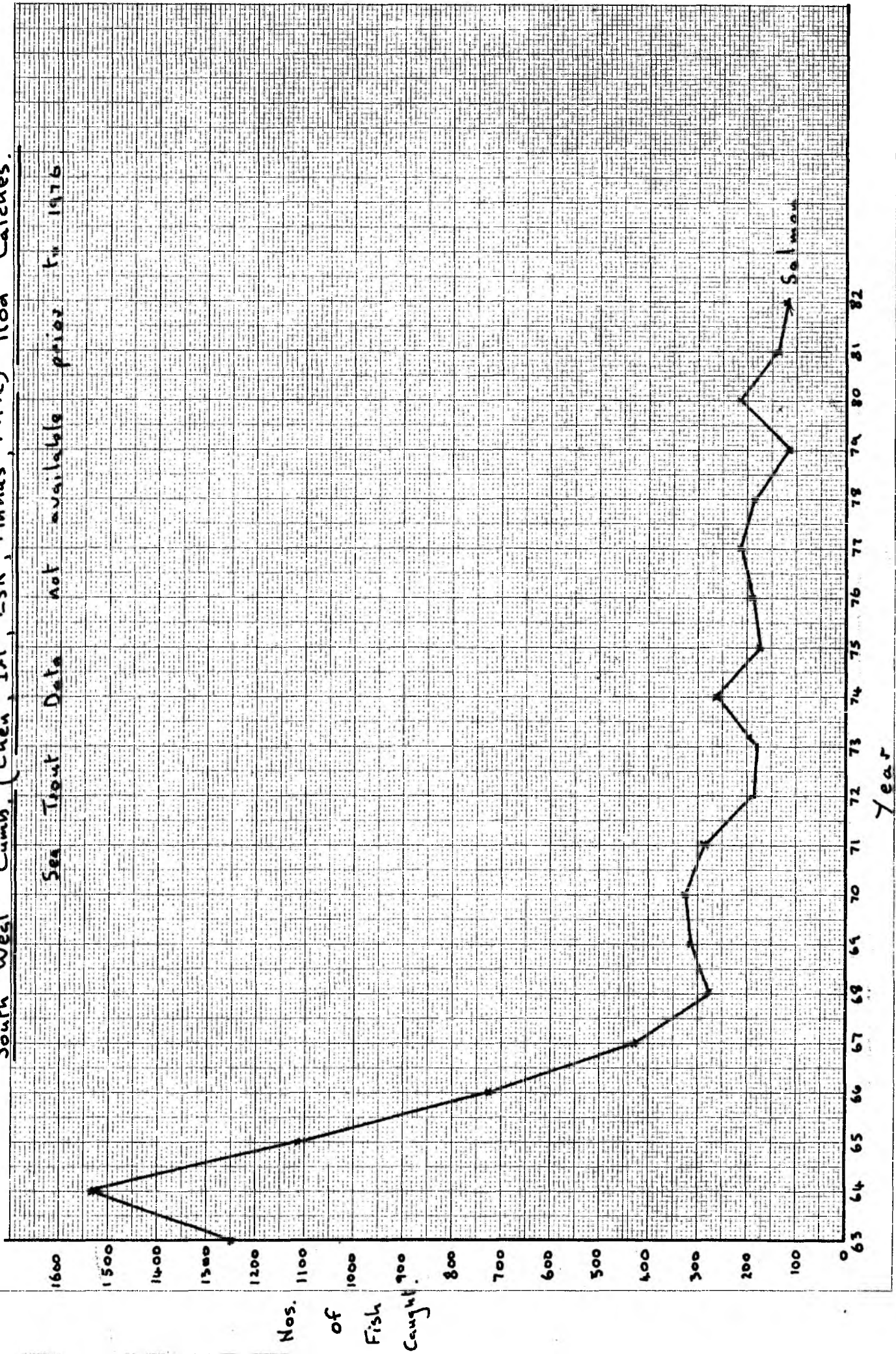
63-82

No
of
Fish
Caught.

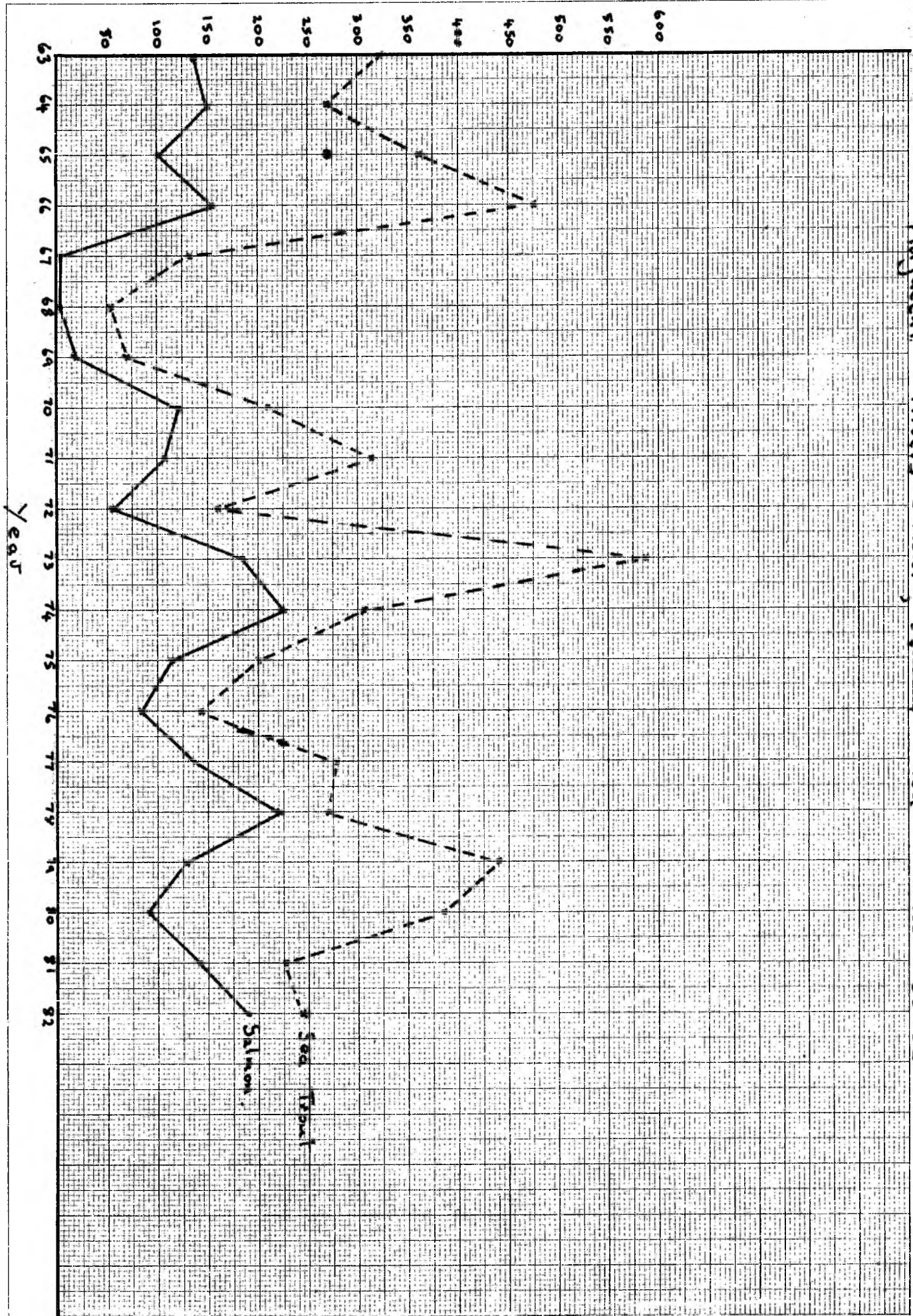
Duddon Rod Catches 63-82

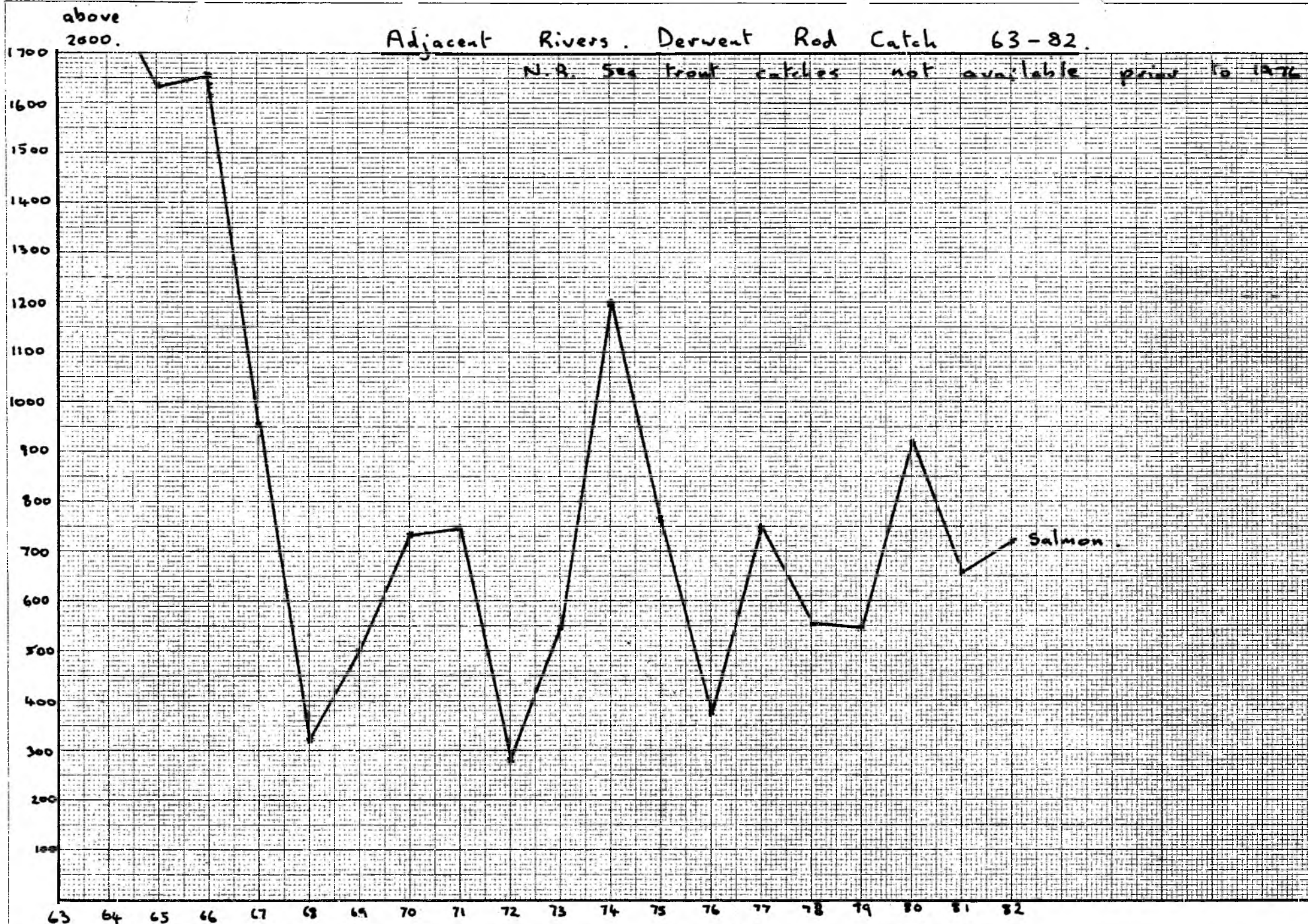


South West Cumb. (Ehen, Iat, Esk, Annas, Mite) Rod Catches.



Adjacent Rivers - Kent, ~~Pennant~~ Rod Catches 63-82





NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY, 1984DECLINE OF SALMON STOCKS, RIVER EDEN

A paper on this subject, prepared by the Chairman of the former Northern Area Committee, is appended. Comments on certain points made in it may be helpful to members.

There is no doubt that there has been a real decline, over a period of years, in the rod fishery of the Eden. Whether this truly represents, as suggested by Mr. Ecroyd, a severe decline in the salmon stocks of the river is, however, less clear. What has happened in recent years is that a former spring salmon rod fishery has become a summer salmon/grilse net fishery. Catch records for past years indicate that rod catches for September/October (after the end of the netting season) are still comparable with those of the pre-UDN era. Spring fish, however, are taken in negligible numbers by comparison with the same era - a phenomenon not confined to the Eden. Conversely, the net catches of summer fish have been maintained at a high level and the 1983 season is said to have been the best in living memory. While no figures are available from the Scottish shore, the extensive fisheries there will undoubtedly have benefitted similarly. The following comments relate to the specific points made by Mr. Ecroyd:-

1. Holmwrangle Hatchery

Within the limitations of water supply and availability of ova, this hatchery operates to capacity. There is no scope for improvement in water supplies, and supplies of ova could be improved and made more reliable only by the provision of a major trap on the Eden - a development which would be prohibitively expensive. The use of local ova is undoubtedly the best approach, but it must be appreciated that if more fish are removed for stripping, natural spawning upstream is reduced. Natural reproduction is unquestionably the most effective means of maintaining stocks, given suitable spawning grounds - which exist on the headwaters of the Eden and its tributaries.

Artificial propagation is a convenient tool for the fishery manager, enabling him to 'seed' unused or inaccessible waters, waters where spawning is difficult due to bed conditions but where fry can grow on, or to 'fill in' gaps in any particular seasons's spawning. It is not a substitute for natural spawning in any salmon river worthy of the name, and should not be so regarded. Additional supplies of ova can be obtained - without any great degree of reliability - from Scottish sources, but it must be questionable whether these 'foreign' ova produce fish as well adapted, in terms of evolution, to the Eden as is its own native strain of salmon. In addition, the cost of Scottish ova has escalated greatly in recent years due to the introduction of disease-testing of broodstock.

There is no scientific support for the widespread belief that ova from spring-running fish produce progeny with the spring-running habit,

although when spring runs were predominant they appeared to be self-supporting. It is widely believed now that the occurrence of predominantly spring and predominantly autumn runs of salmon in a river is the result of cyclical trends over a long period, and there is considerable historical evidence in support of this view. As spring runs decline, there is a corresponding upsurge in runs of summer fish and grilse, becoming progressively later and, in due time, returning again to spring runs. This is what appears to be occurring on the Eden. It is thus improbable that the planting of Norwegian, Icelandic or Canadian ova - even if obtainable - would influence the present trend in the slightest degree.

There is no question of any further expansion at Holmwrangle. The only feasible line of development is at Haweswater; this is at present being re-examined in the light of possible alternative financing and operating methods. Given the resulting increased production capacity, a greater input of juvenile salmon, possibly at a later stage of development, could be made to the Eden - and to other waters also - but inevitably the nets will have 'first cut' at any increased numbers of returning adults, and, as indicated above, there is little likelihood of the slightest improvement in the spring run in the near future.

2. Natural regeneration

In recent years, increased attention has been paid to the headwaters of the Eden, particularly at spawning time, and a number of poachers have been apprehended. The indications are that this has discouraged illegal activities, but the catchment area upstream at Kirkby Stephen is large and remote and continuous close surveillance is not possible.

3. Draft netting

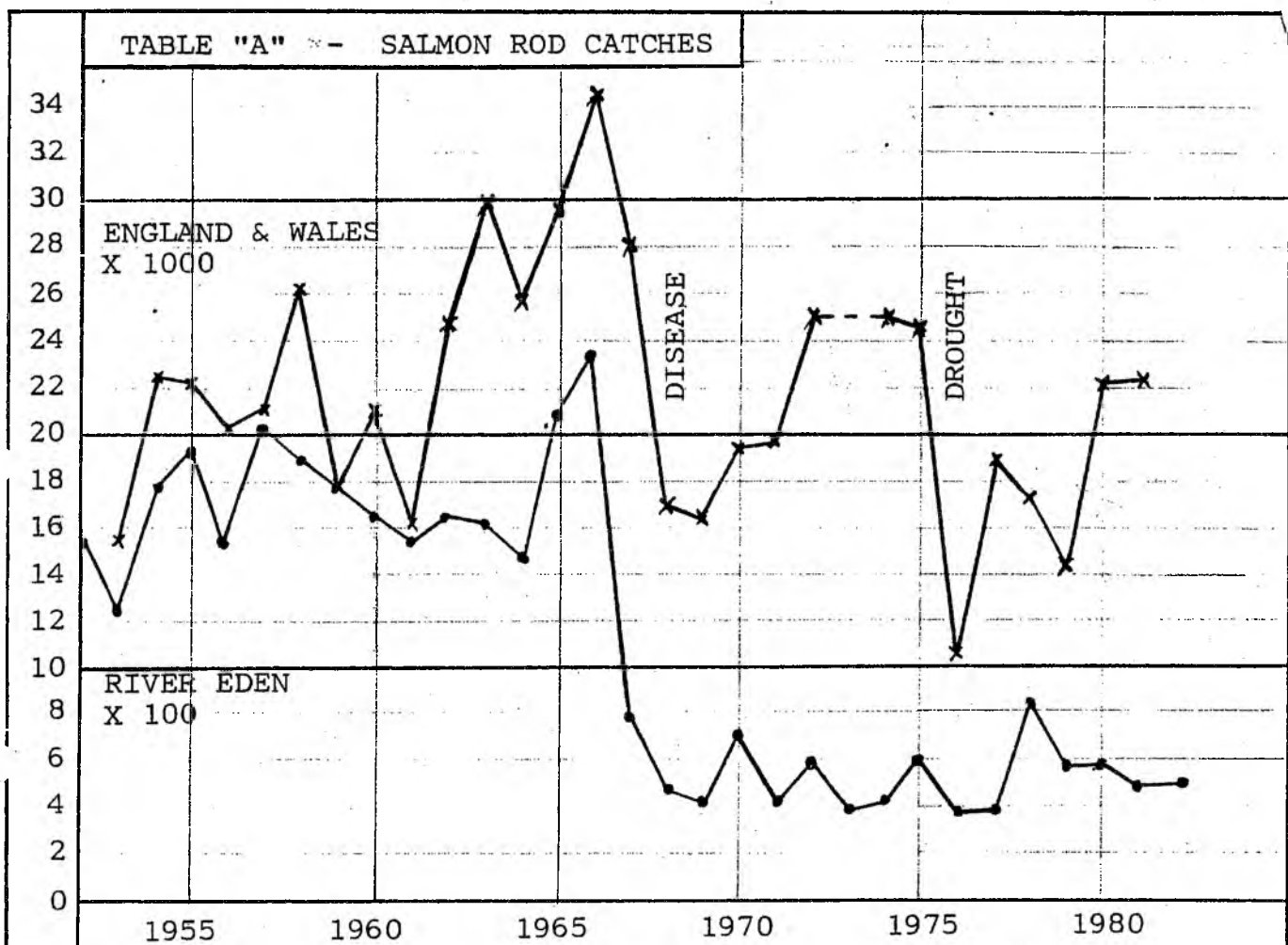
Taking place, as it does, in the narrow tidal waters of the Eden, the elimination of this activity would be likely to pass a number of additional fish into the river, largely during the late summer. It should not be forgotten, however, that some 160 haaf netters operate on the English side of the Solway, together with an extensive network of stake nets on the Scottish shore, the catch of which (although no figures are available) probably substantially exceeds the total catch of the two draft nets and the haaf nets combined. The true benefits, therefore, of elimination of draft netting must be somewhat questionable in relation to the overall fishing effort on the Solway. Nevertheless, given that fish which are not taken by the draft nets will enter the river, it is clear that the principal beneficiary will be the rod fishery of the river. It would therefore be reasonable to expect riparian owners to meet the whole, or at least the major part, of any costs which might be incurred in buying out the netting interests.

THE DECLINE OF THE SALMON STOCKS OF THE RIVER EDEN

The River Eden and District Fisheries Association is gravely concerned about the decline in salmon stocks that has steadily been taking place over the last fifteen years or more and the consequent poor state of salmon fishing in the River Eden. The Association feels there cannot be sufficient awareness of what is a most alarming situation.

Until the outbreak of disease in 1967, the Eden was a noted river, second only to the Wye in its yield of salmon. The recent publication by the National Water Council, "Fisheries Statistics 1982", shows that of the thirty rivers recorded, over half now have a greater rod catch than the Eden. This once great river has declined into a state of mediocrity

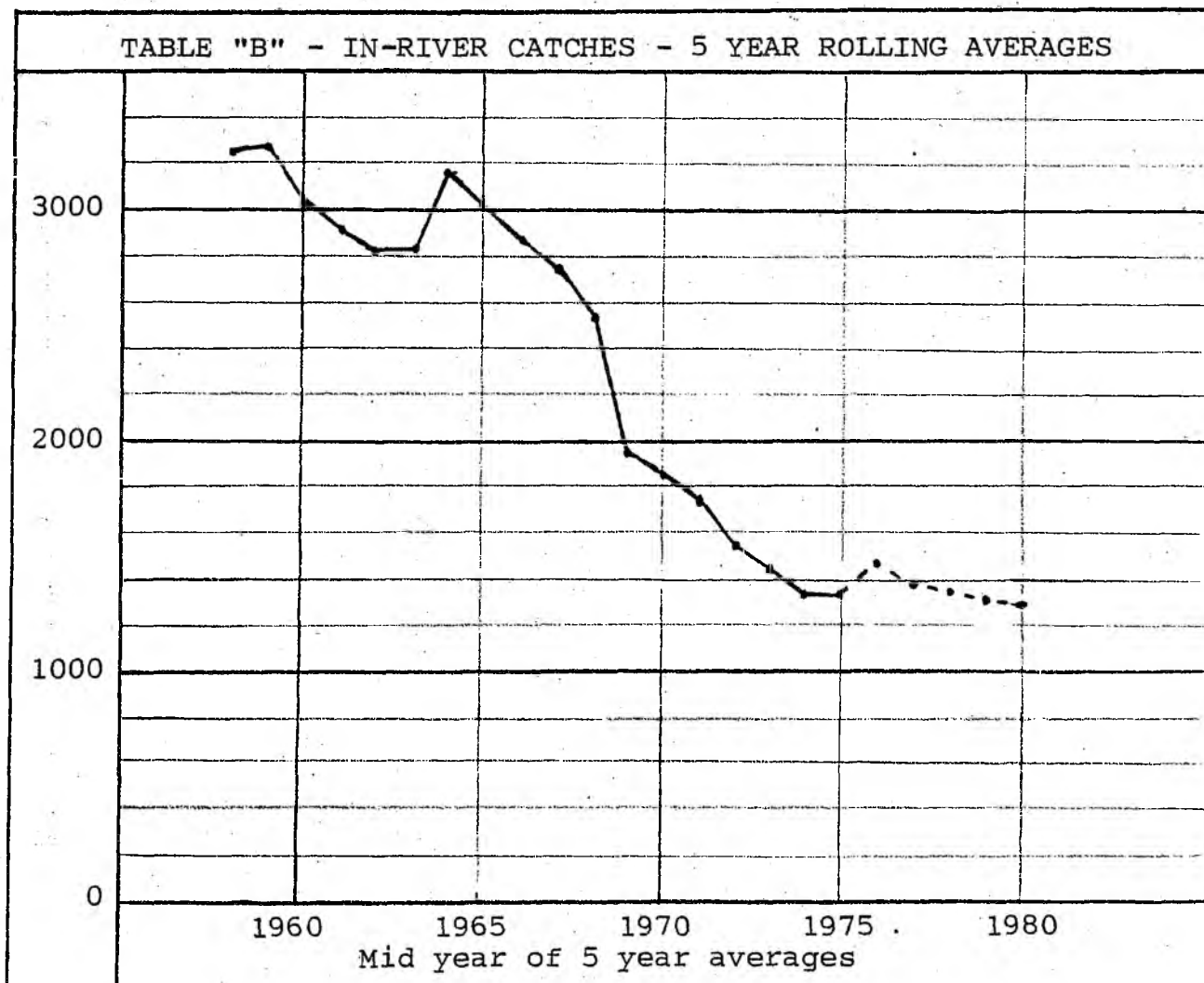
Most rivers in England and Wales suffered from disease. Table "A" shows clearly the effect the disease had on fishing. It should be noted that whilst nationally disease caused a reduction of 50% in rod catches, the effect on the Eden was a reduction of 80%. It should also be noted that the former have recovered to a large extent, whilst the Eden has not, and its rod catches are still less than one-third of the pre disease average.



Sources: N.W.C. Fisheries Statistics 1982.
C.R.A. and N.W.W.A. Annual Reports.

There have been occasions in the past when the River Eden has suffered considerable reductions in catches due to disease or other causes, but the river has always recovered within a few years. On this occasion it has completely failed to do so. The River Eden and District Fisheries Association is particularly concerned, for not only have rod catches fallen to a miserable level and are failing to show any signs of returning to their former levels, but because much more significantly, the "in-river" catches (rods, coops and draft nets) have steadily declined from an average yield of over 3,200 salmon per year to under 1,300. This decline is still continuing, with the catch for two out of the last four years being below 1,000 salmon. This steady decline must mean that there is a reduction each year in the level of stocks, and this poses a very dangerous threat to the future of salmon fishing in the River Eden.

Table "B" shows the decline of in-river catches converted into 5 year rolling averages. It gives cause for alarm, and the River Eden and District Fisheries Association considers that the situation demands an urgent and thorough investigation, and that measures must be taken to halt the decline in salmon stocks and to ensure that they are enabled to return to their former levels. Action must be taken swiftly to prevent further deterioration of the fisheries.



The catch figures from which this table has been drawn are itemised in the appendix.

The River Eden and District Fisheries Association has considered the situation carefully and given it long discussion and great thought. As a result of this, the following observations, comments and suggestions are put forward for consideration.

1. Table "B" is based in part on estimated catches. The exact figures should be obtained to provide an accurate assessment of the situation. The figures should be broken down into seasons.

2. Holmewrangle Hatchery

Stocking levels

Between 1961 and 1967, before improvements were made, an average of 661,500 fed fry were planted annually into the Eden system. Since 1974 an average of only 202,000 per year have been introduced.

Is the Hatchery being used to its full capacity ?

Are new facilities needed ?

Is a completely new Hatchery required ?

Origin of Ova

When the Hatchery was built at the beginning of the century, ova of Norwegian origin was acquired. The resultant strain of salmon flourished until wiped out by disease sixty years later. The intention was, and it succeeded, that the salmon would run into the Eden in early Spring when the water was the same temperature as the Norwegian rivers in Summer at the time of upstream migration.

It is interesting to note that some forty years ago small fish from the Brora were introduced to improve the late Spring and early Summer fishing. It failed to do so as they ran earlier in the Eden, probably due to water temperature.

The possibility of re-introducing ova from Norway, or possibly from Iceland or Northern Canada, should be considered.

3. Natural regeneration

In the 1950s and early 1960s the number of redds counted was around 2,000 per year, the majority being in the Upper Eden and its tributaries and the Eamont and its tributaries. In recent years the number counted has been around 500, with a much higher proportion in the lower river. Nothing can be done to alter the present distribution, however, the upper redds are of vital importance for any improvement to salmon stocks.

In the past the upper reaches were patrolled by a large force of bailiffs every autumn. For many years there have been reports of widespread poaching in this area. Some may be rumours, others exaggerations, but they have been heard for so long and with such consistency that they cannot be without foundation; also, many reports have been confirmed by responsible people.

Increased surveillance is needed to protect spawning stock in the Upper Eden and Eamont and the tributaries.

4. Draft Netting

In 1946, at a time when salmon catches were declining, the then Eden Board of Conservators was advised by Dr. Pryce-Tannant, the Fishery Advisor to the Ministry, to find ways to abolish draft netting. This proved to be too difficult a task at the time, and nothing was done until the Cumberland River Board took the matter up again in 1957. As is well known, the Board published a bye law in 1963 to abolish the netting, and a Public Inquiry was held the following year. The Inspector appointed by the Minister recommended that the bye law should be approved. He supported the Board in their opinion that stocks were declining and the netting should be abolished before the decline became too serious. Regretably, The Minister did not uphold his Inspectors recommendation.

N.B. The in-river catch at that time was almost 2,000 salmon more than it is today.

It is believed the owners and lessees of the netting rights are now prepared to cease their operations. If this was to happen, several hundred more salmon would be allowed to ascend the river, thereby increasing the spawning stock.

The netting rights should be acquired by purchase or long-lease.

It is hoped that the foregoing will be helpful and form a base for further consideration. The paper has not delved into the problem in any great depth, but it is hoped it may draw attention to the plight and condition of what should be the major salmon river in the area of the North West Water Authority.

The River Eden and District Fisheries Association makes a strong plea for action to be taken to halt the decline of salmon stocks, and implores the Authority to act before it is too late.

APPENDIX

THE RIVER EDEN - SALMON CATCHES 1956 to 1982.

<u>YEAR</u>	<u>ROD & LINE</u>	<u>COOPS</u>	<u>DRAFT NETS</u>	<u>TOTAL IN-RIVER</u>	<u>HAAF NETS</u>
1956	1489	200 Est	1059 Est	2748	471
1957	2094	150 Est	1057 Est	3301 Est	450 Est
1958	1874	250 Est	1351 Est	3475	472
1959	1799	239	1593	3631	727
1960	1619	152	1185	2956	636
1961	1535	265	1162	2962	661
1962	1682	100	911	2693	722
1963	1615	235	708	2558	969
1964	1435	207	1273	2915	956
1965	2089	300	550	2934	630
1966	2333	211	2143	4687	636
1967	741	136	1060	2137	400
1968	487	110	1305	1902	300
1969	432	53	1980	2465	200
1970	723	86	895	1704	150
1971	430	97	1190	1717	225
1972	508	134	760	1402	200
1973	397	90	995	1681	205
1974	410	70	870	1350	170
1975	503	48	660	1211	440
1976	313	36	880	1229	350
1977	391	50 Est	920 Est	1361 Est	509 Est
1978	862	100 Est	1260 Est	2222 Est	655 Est
1979	556	80 Est	264 Est	900 Est	774 Est
1980	578	70 Est	450 Est	1098 Est	400 Est
1981	453	70 Est	470 Est	993 Est	797 Est
1982	512	100 Est	673 Est	1285 Est	1000 Est

Sources: Rod & Line - C.R.B., C.R.A. and N.W.W.A. Annual Reports.

Coops & Nets - 1956 to 1963 - Papers for 1964 Public Inquiry.
1964 to 1966 - Papers for 1967 Public Inquiry.
1967 to 1976 - Table supplied to E.P. Ecroyd
by N. Mackenzie (A.F.O.).
1977 to 1982 - Estimated figures based on
local knowledge and heresay.

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NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY, 1984APPOINTMENT OF RESERVE BAILIFFS

1. Following approval by the Authority of a scheme to appoint a number of reserve bailiffs in North and South Cumbria who could be called out to reinforce the full-time bailiff force, and the allocation to the scheme of £10,000, opposition to it was indicated by the staff side of the Rivers Division D.J.C.C.
2. They were opposed to the scheme on the grounds that it threatened the jobs of bailiffs and that the proposed arrangements for the reinforcement of the bailiff force were, in any case, unnecessary. It was contended that if full Blue Book conditions of service were to be introduced for bailiffs (a claim currently under dispute) there would be no difficulty in meeting any extended hours working which might be required in connection with anti-poaching work, using existing bailiff staff.
3. A meeting of all bailiffs was called by the Regional Fisheries Officer, who explained to the men in detail the background to, and working of, the proposed scheme. Bailiff staff, however, remained unconvinced, and a formal dispute was declared by NALGO. Meetings have been held with the District Officer of NALGO in an attempt to resolve the dispute and a further meeting will take place on 20 January. Any further information and progress will be reported to the Committee.

NORTH WEST WATERREGIONAL FISHERIES ADVISORY COMMITTEE30 JANUARY, 1984FISHERIES IMPROVEMENT GRANT & FISHERIES EQUIPMENT LOAN SCHEMES

1. The two schemes were inaugurated in April 1983 with an allocation of £5,000 to each. In the case of the improvement grant scheme, only 11 applications for grant had been received by the end of 1983. Two of these related to work already carried out and paid for by the applicants and were thus disqualified. In the remaining 9 cases, application forms were sent out, but only one has been returned and is being processed.
2. In the case of the equipment loan scheme, the bulk of the funds made available were rapidly spent on buying equipment for the loan pool. Subsequently it was indicated by the staff side of Rivers Division D.J.C.C. that NALGO was opposed to the scheme on the grounds that it represented a threat to the jobs of bailiffs and the use, by unqualified persons, of "the tools of their trade". A formal dispute was declared, and the scheme has consequently been inoperable.
3. A meeting of all bailiffs was called by the Regional Fisheries Officer, who explained to the men in detail the background to, and working of, the scheme. Bailiff staff, however remained unconvinced. Meetings have been held with the District Officer of NALGO in an attempt to resolve the dispute and a further meeting will take place on 20 January. Any further information and progress will be reported to the Committee.